

# NEOTYPIFICATION OF *ENSLENIA ALBIDA* AND A NEW COMBINATION IN *AMPELAMUS* FOR *CYNANCHUM LAEVE* (APOCYNACEAE: ASCLEPIADOIDEAE)

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## ABSTRACT

Recent taxonomic advances are supportive of recognition of various climbing milkweed genera previously submerged in *Cynanchum* L. Although caution regarding resurrection of unispecific *Ampelamus* Raf. has been suggested, recent acceptance has been implicit through a listing of the genus in a synopsis of the subtribes and genera of the tribe Asclepiadeae. As the name is currently in “standardized” use among weed scientist and has additionally appeared in recent drafts, a note regarding the correct nomenclature is warranted. This paper addresses the typification and synonymy of the entity variously known as *Gonolobus laevis* Michx., *Cynanchum laeve* (Michx.) Pers., *Vincetoxicum gonocarpus* Walt. var. *laevis* (Michx.) Britton, *Enslenia albida* Nutt., and *Ampelamus albidus* (Nutt.) Britton.

## RESUMEN

Los avances taxonómicos recientes apoyan el reconocimiento de varios géneros de algodoncillos trepadores incluidos previamente en *Cynanchum* L. Aunque se ha pedido precaución con respecto a la resurrección del género monotípico *Ampelamus* Raf., ha sido implícita la aceptación reciente mediante un listado del género en una sinopsis de las subtribus y géneros de la tribu Asclepiadeae. Como el nombre está actualmente en uso “estandarizado” entre especialistas en malas hierbas y además ha aparecido en recientes borradores, está justificada una nota que trate de la nomenclatura correcta. Este artículo trata de la tipificación y sinonimia de la entidad conocida como *Gonolobus laevis* Michx., *Cynanchum laeve* (Michx.) Pers., *Vincetoxicum gonocarpus* Walt. var. *laevis* (Michx.) Britton, *Enslenia albida* Nutt., y *Ampelamus albidus* (Nutt.) Britton.

## INTRODUCTION

*Cynanchum laeve* (Michx.) Pers. was originally described as *Gonolobus laevis* Michx. in 1803. However, due to mixed elements on the type sheet, namely flowers and angled follicles of *G. suberosus* (L.) R. Br. (*Gonolobus gonocarpus* (Walter) Perry) and leaves of *Gonolobus laevis* Michx., confusion has surrounded the correct nomenclature of this entity (see Vail 1899, Woodson 1941, Drapalik 1969 for more detailed discussions). Reconciling the material with Michaux’s description of *Gonolobus laevis*, Vail (1899) accepted the corresponding elements on the sheet as belonging to the taxon in her time known primarily as *Enslenia albida* Nutt. or *Ampelamus albidus* (Nutt.) Britton and designated the appro-



priate elements on the sheet as the type for *Gonolobus laevis* Michx. An image of the specimen is available in the IDC microfiche (#6211) set of the Michaux herbarium on fiche 29 of volume I.

A type specimen was not designated by Nuttall (1818) in his original description of *Enslenia albida* on the other hand, although he clearly described (p. 165) the 5-parted corolla of linear-oblong petals and the entirely free, deeply bifid coronal segments of the species. Based on his description in the “Genera of North American Plants” (Nuttall 1818), it is likely that he saw at least three specimens in the course of the work—presumably collected from the following localities:

“Near Shepherdstown, on the gravelly banks of the Potomac, Virginia” (U.S.A), “on the high sandy banks of the river Scioto” (Ohio, U.S.A), and “near Cincinnati (Ohio)” (U.S.A).

Unfortunately, no specimens bearing these localities, or the distinctive asterisk notation used by Nuttall on herbarium sheets when describing new genera or species, could be found at PH—the repository for the majority of types from his “Genera” (Pennell 1936; Stuckey 1966). In addition, no such specimens could be found at BM (the eventual repository for Nuttall’s private herbarium and most post-“Genera” collections), E, F, GH, K, LIV, MANCH, MO, and NY—all potential collections to host Nuttall material (Pennell 1936; Stuckey 1966; Stafleu & Cowan 1981). The herbaria of DWC, FI, and P were also contacted, but no responses were received. Specimens of *Enslenia* collected by Nuttall in Arkansas (i.e., post-“Genera”) were found at BM, G-DC, NY, and PH, however. In addition, two specimens from Ohio were found respectively at G-DC and OXF. Of the two specimens residing at G-DC, the one from Arkansas was received by DeCandolle in 1825 and the one from Ohio in 1824. Unfortunately, labels on both specimens are in DeCandolle’s hand and not in Nuttall’s. Thus, aside from DeCandolle’s word, there is no other evidence that Nuttall actually saw the specimens. On the other hand, there is no reason to believe that DeCandolle would forge the specimens’ history. Nuttall apparently passed through Ohio only three times in his life: Jun–Jul 1816, Oct–Nov 1818, and Mar 1834 (Pennell 1936). Interestingly, the Ohio specimen at G-DC bears inflorescences in full bloom. In the northern United States, the species is known to flower primarily through August (Gleason 1952). It is unlikely that flowering would occur in mid-Oct through November or in early March. Thus, it can be deduced that the material is likely part of Nuttall’s original collection of the species in the summer of 1816, prior to his later description of the novelty in his “Genera.” In the absence of any other material with labels in Nuttall’s own hand, the Ohio specimen at G-DC is here chosen as the neotype of *Enslenia albida* Nutt. It should be noted however, that the Ohio collection at OXF may also belong to Nuttall’s original 1816 collection. Aside from the species name, the OXF specimen label bears the locality (“Ohio”), “com. Nuttall,” and a year which I could not completely make out (“18?0”). The specimen also bears an inflorescence and flowers, leading to



the same deduction concerning its potential year of collection as the Ohio specimen at G-DC.

Unfortunately, due to an earlier homonym (i.e., *Enslenia* Raf., Fl. Ludovic. 1817), the generic name *Enslenia* was unavailable for the climbing milkweed taxon named by Nuttall. Rafinesque (1819) instead suggested that *Ampelamus* (*Ampelos* [αμπελοζ] = vine, *Psammos* [ψσαμμοζ] = sand) be used. Britton (1894) first validly published the requisite combination for the species name. Unfortunately, Britton (1894) spelled the genus "Ampelanus." This spelling was followed by Vail (1899) and appears again in the key to the Asclepiadaceae in Gleason (1952), although not in the description of the genus and species. However, as Britton (1894) explicitly noted that he made the combination "to maintain Rafinesque's very suggestive name," most recent authors (e.g., Woodson 1941; Shinnars 1964; Liede 1997a, 1997b) have recognized "Ampelanus" as an orthographic error to be corrected to *Ampelamus*.

Numerous authors have treated the respective names in *Gonolobus*, *Enslenia*, and *Ampelamus* in synonymy within Persoon's 1805 combination of *Cynanchum laeve* (Michx.) Pers., based on Michaux's *Gonolobus laevis* (see Woodson 1941; Shinnars 1964; Radford et al. 1968; Correll & Johnston 1970). However, recent taxonomic advances are supportive of recognition of various climbing milkweed genera previously submerged in *Cynanchum* L. (Liede 1997a, 1997b; Liede & Meve 1997). Although Liede (1997a) suggested caution regarding resurrection of *Ampelamus* Raf., she implied acceptance through listing of the genus in a synopsis of the subtribes and genera of the tribe Asclepiadeae (Liede 1997b). As *Ampelamus albidus* is currently in use as the "standardized" name accepted by the Weed Science Society of America (Patterson et al. 1989) and has additionally appeared in recent drafts (e.g., Weakley, in prep.), a note establishing the correct name of the entity is warranted. Resurrection of this unispecific genus requires a new combination based on *Gonolobus laevis* Michx.

#### SYSTEMATIC TREATMENT

***Ampelamus laevis*** (Michx.) Krings, comb. nov. *Gonolobus laevis* Michx., Fl. Bor.-Amer. 1:119. 1803. *Cynanchum laeve* (Michx.) Pers., Syn. pl.1:274. 1805. *Vincetoxicum gonocarpus* Walt. var. *laevis* (Michx.) Britton, Mem. Torrey Bot. Club 5:266. 1894. TYPE: U.S.A. ILLINOIS: Michaux (HOLOTYPE: P, IDC-#6211, 1:29!).

*Enslenia albida* Nutt., Gen. N. Amer. pl. 1:164. 1818. *Ampelamus albidus* (Nutt.) Britton ("Ampelanus"), Bull. Torrey Bot. Club 21:314. 1894. TYPE: U.S.A. OHIO: [1816], Nuttall (NEOTYPE: here designated, G-DC!)

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